HQ GENERAL COMMENTS FINAL REVIEW OF PMBP MANUAL

1. General -

- a. CEMP-MP prepared a Project Manager's Guide for Military Construction (http://www.hq.usace.army.mil/cemp/cempm/policy/managersguide.htm). An update version was developed in 2000 to cover all programs (civil, military and environmental) and to be linked to as many PMBP web sites as possible. In that subject on-line web-based PMBP manual was also beginning to be developed at the same time as the PM Guide update was being completed, the strategy was to incorporate the new draft PM Guide into subject. That has not been yet accomplishes and therefore valuable tie-ins to web sites being used by Corps offices are not addressed. There are many examples, and reference is made to one of many important omissions Quality Management Interface. Some of the quality web sites that were to be referenced with narrative and flowchart relationships follow:
 - (1) Total Army Quality (TAQ) @ http://www.hqda.army.mil/leadingchange
- (2) A-E, service, and construction contractor quality control (CQC) (FAR 46.105, 46.312 and 56.246-12) and Corps quality assurance (QA) (FAR 46.401). (http://www.arnet.gov/far/)
- (3) Corps of Engineers Quality Management Regulations; ER 1180-1-6, Sep 95, CW/MP Construction; ER 1110-1-263, Apr 98, HTRW Program; and ER 1110-1-261, Mar 98, Lab Testing.
- b. Suggest that a "check list" be defined and displayed on this on-line web-based PMBP manual as displayed and suggested in the above draft PM Guide. This is a simple checklist tailored to each project that shows lead PDT members responsibilities and is extremely useful in developing the PMP. An example of several checklist activities follows:

TASK	Lead**	DESCRIPTION
Authorization	PM	Obtain authorization and funding
A-E CBD	A-E Support	Prepare, staff, release
ACASS	A-E Support	Check A-E qualifications
A-E Procurement	A-E Support	A-E Selection Committee
A-E Negotiations	A-E Support	Final cost negotiated.

Response: These web sites will have linkages through the PMBP Portal. The PMBP Portal Team has taken this as an action item.

2. PROGRAM/PROJECT INITIATION PHASE

The processes in this phase are fairly simplistic and assume that the cost of the work effort is already known. At some point someone will have to take the needs assessment from the customer and estimate the cost of delivering a product. This cost estimation process is not addressed in this initiation phase. Conceptually cost estimation of work could be done as part of the District/Center Workload Analysis and Resources Leveling

Process (PROC1020) but this doesn't seem to be a part of that process as currently configured. Response: Interfacing/replacement of some legacy systems to perform this task are a part of the P2 Scope (such as Civil Works Work Allowance System initiation will be performed once as a new process.)

3. One of the aspects of the PMBP that I feel needs to be addressed is the process and authority for the establishment and management of Project Delivery Teams (PDT), and at a higher level, the Program Delivery Teams (PgDT), and how they integrate. ER 5-1-11 establishes the requirement for the PDT, PMPs and Program Management Plans (PgMPs). However, it does not clearly articulate the roles, responsibilities, and authorities of the members of the PDT, and does not address the configuration, roles, responsibilities or authorities of the PgDT. On a particular point, ER 5-1-11 states (para 8.f.) that the District "...DPM has programmatic oversight over all work." This in effect negates the role of any higher echelon organization and/or 'corporate' Program Manager in the oversight, management, or resourcing of a Program.

Other organizations across the Army and DoD have also wrestled with this issue, and have developed processes, procedures, and guidelines that should receive serious consideration for augmentation/supplementation to the USACE PMBP. Specifically, the Under Secretary of Defense for Acquisition, Technology and Logistics and the Assistant Secretary of Defense for Command, Control, Communications and Intelligence have developed and published the "RULES OF THE ROAD, A Guide for Leading Successful Integrated Product Teams" Revision 1, October 1999, that deals with these issues. It establishes the procedures for the establishment and chartering of an IPT (read: PDT); establishes the relationships between elements of the Program from Sub-Working Groups to Headquarters-level Overarching Integrated Product Teams (read: HQ PgDT). Although this particular document is prepared to address management and oversight of Major Defense Acquisition Programs, the principles and practices are not unique to that business proces, but are applicable to any 'corporate' approach to project and program management requirements.

The Document is enclosed for review and consideration. Response: P2 Military Team will review.



4. I think they've done a good job of incorporating our comments, particularly making clear that funding needs to be received before work can proceed. But, there are a few areas that aren't as clear as they could be. In the Revised Executive Summary, the Project Initiation Phase includes "Project Workload Analysis and Resource Leveling" and "Receipt of Funds Process". AFTER THAT, the Planning Phase includes "Client Scope Definition". AFTER THAT, the Execution and Control Phase includes "Receipt of Funds". I'm not sure what the difference is between the "Receipt of Funds Process" and

the "Receipt of Funds", but if the second one is when we actually receive the money, how do we do work up to that point? Response: The Executive Summary will be evaluated for consistency. Receipt of Funds occurs throughout the phases of the processes.

As a general comment, the manual doesn't specifically state this, but it implies that there is one PM for the project. I don't know if that is the intent or not, but some of these projects are so large that one PM can't possibly do everything that is outlined for the PM to do. I think there should be a provision added to have an Assistant PM, or Deputy PM, or even Alternate PM on any large project. There isn't anything in here that says that can't be done, but by saying that it can be done, we are opening up new possibilities. Response: The local SOPs do permit the PM to structure the PDT as required.

- 5. I am concerned that under the "Construction Phase of the PMBP" only the S&A Study for Military Construction was included. This study is but one small part of what goes on during construction of a project. There is no reference to applicable Engineering Regulations that in large part define our requirements in this area. For instance, there is no reference to: ERs 415-1-10, 415-1-11, 415-1-13, 415-1-15, 415-1-17, 1180-1-6, 1-1-11, 1180-1-9, 415-345-38, etc. These ERs define our requirements for Quality Management, Evaluations, Submittals, Reviews, Transfer and Warranty, etc. This section within the PMBP should include all business processes that entail the construction phase of the PMBP. Response: A hyperlink to the USACE Publications page will be added to the PMBP Portal.
- 6. The current PMBP manual is silent on the subject of the Corps of Engineers Centers of Expertise The PMBP needs to recognize and address the role of the Corps of Engineers Centers of Expertise. To accomplish that and to incorporate the CX's it is recommended that a Business Process be developed titled "Accessing and Utilizing Centers of Expertise". That process should feed into PROC 2020 Team Establishment. The process should be generic in nature to cover all of the Corps Centers of Expertise. It is recommended that representatives from the CXs work with the P2/BP team to develop that process. Response: PROC 2020 will be revised to include guidance on consideration of CXs in evaluating resources. PMBP Portal will include a link to the CX website.
- 7. The intent of the PMBP and associated P2 software is to interface with existing corporate AIS. The P2 software being developed must consider all of the "legacy" systems/software that will be needed to support P2. The PAX 1391 processor/3086 module should be used to populate the P2 fields for the PAs and CWEs. This will force PMs to keep one set of books on their projects and not have varying PAs and CWEs in the DoD budgetary system. The PMBP only appears to be looking at a CEFMS interface at this point and should consider an interface with PAX, RMS, CAPCES, HAG and MCACES. Recommend that the PMBP address which corporate AIS that the P2 software should interface with and develop a hierarchy of software/system interfaces for the programmers. Response: All systems will be evaluated and additional legacy systems will be interfaced during Phase II of P2 Implementation.

AIS	HQ PROPONENT	TECHNICAL PM
MCACES	Ray Lynn	Jim Nichols – (256) 895-1842
PAX ENG 3086	Ami Ghosh	Carol Zurowski - (256) 895-1837
HAG	Gil Kim	Rex Mclaury – (256) 895-1833
PACES	Miguel Jumilla	Karen Schofield - (256) 895-1069

- 8. A PM Business process for LCCE should be considered. Response: Do not feel a separate process is necessary, but do need to ensure that LCCE concerns are included in the PMP.
- 9. "Legacy" systems that will have to support P2 need to be identified. Response: Noted and agreed. (ongoing)
- 10. (Cost Engineering)I can't tell when this process starts. Several ER's exist that define how a Feasibility Study is done, and what cost engineering's roll is in that process (i.e., the production of the baseline estimate and construction schedule for the project.) If the initiation of this process predates the feasibility study, then a lot of ER's will have to be rewritten. If initiation of this process comes after the approval of the feasibility study, and therefore the approval of the baseline estimate, then our entire process should be included in the PMBP (i.e., Resource estimate development. Change management, contingency funds, activity development, etc.) Response: The BP Manual does not specify the administrative/functional or technical requirements which are detailed in many ER's, as you say. AIS interfaces will transfer data between P2 & legacy systems, precluding the need for duplicate entries, and facilitating the connection you speak of in your comment.
- 11. (Cost Engineering) Most of the document address and identifies program/project management procedures on developing a project schedule, resource loading, coordination with stakeholders, contract methodology, budget submission, approval authorities, etc. There appears to be no specific responsibility/accountability requirements for each of the PDT members, except that it is the PDT's responsibility that all project aspects and activities are correctly interrelated and that the PDT supports the PM to insure the project runs smoothly. Hopefully, the Program Specific information in the back of the manual (starting with the Civil Works Program on page 207) will establish responsibilities and authorities for functional elements once the sections on each program are completed. For example, the project cost is the ultimate responsibility of the PM. However, the Civil Works cost engineering regulation (ER 1110-2-1302) states in paragraph 19.a: "Cost Engineering is responsible for preparation of the detailed estimate for all construction features, and for incorporation of the costs for lands and damages, planning, engineering and design, and construction management provided through the PM." Likewise, the E&D Military Programs Cost Engineering ER 110-3-1300 states in paragraph 9.b: District or operating major subordinate command (OMSC) cost engineers will prepare

- estimates for projects designed------others." The HTRW Cost Engineering ER 1110-3-1301, paragraph 8.h. states: "The Cost Engineering office shall prepare and/or review all HTRW remedial action and operation and maintenance cost estimates." This information should be addressed or at least referenced somewhere in the sections. Response: A link is being proposed for the PMBP Portal to USACE Publications Web page, which references the information you mention.
- 12.ER 1110-3-1301 also describes in detail the responsibility of the cost engineer and the PM working closely together. Reference to this ER would layout guidelines for cost engineering coordination with PM and other PDT members. Response: A link is being proposed for the PMBP Portal to the USACE Publications Web page, which references the information you mention.
- 13. On both the CW and Military process the PMBP does not do a good job of following the statutes and regulatory requirements for cost estimate development through the various phases of a project. The milestones defined for military projects do not follow AR and ER requirement and milestone are minimally defined for CW projects. The PMBP process should focus on developing CW milestones around the statutory and regulatory requirements and not the budget process. The CW process should also address PB3 updates and Section 902 limitations. Response: This comment appears to be addressing technical or functional requirements, and are more into the arena of procedures and practices concerned with delivery of a product than the project delivery team needs for management of that project.
- 14. The Cost Engineering steering committee recommends hard interfaces between AIS and P2 rather than a manual transfer of data. Response: This has been evaluated at the District level. Team membership from the steering committee will be requested for the PMBP team.
- 15. Processes for CW and Military need to include management controls for use of contingency funds. Response: See existing BP reference documents concerning contingency funds.
- 16. The PMBP should require the Cost Engineering element of the PDT to input the cost data into P2 rather than the PM in order to avoid the possibility of multiple baseline cost estimates. Response: An interface with MCACES is being evaluated for the future; until that time, the PDT member may per their local SOP enter the data into P2.
- 17. Not sure how Cost Engineering WBS's interact with Program and Project Management WBS's being used throughout the PMBP, but they probably should be looked at so they fit together. Response: Coordination will occur to ensure proper system coding and consistency between both WBS's.
- 18. Several of the processes emphasize 'resourcing (dollars and manpower) to the lowest organizational level possible for each activity (in the exection process)'. The PMBP ER, I believe, suggests resourcing to the branch or section level, where practical. I'm

concerned about the cost to the customer and our FOAs in terms of additional requirements for developing these finite estimates and especially the time and effort, and again cost to the customer, to maintain and revise the estimates every time there's a schedule change, late submittal, other priority work, emergency work, etc., etc. This, especially in light of limited additional manpower authorizations and customer complaints of high Corps costs. For in-house designs (civil and military) this resourcing to the lowest level for each activity may be necessary, practical and improve cost controlbut not necessarily, in my opinion, efficiency or quality. Currently, the majority of military design work is A-E executed with the in-house S&R effort at roughly 20 - 35% of the A-E effort. This may amount to 2-4% of the construction contract value. Is it practical, cost effective or even necessary to attempt to over manage this in-house effort by detailed resourcing of all activities, i.e. PM management, civil, mech, elec. etc. reviews for concept, final design submittals, review meeting, advertising and award, as opposed to a general high level resource plan based on cost experience? Will PMs, with 15-30 or more projects (or PDT members), have the time and desire to maintain these detailed resourcing requirements once developed? What degree of accuracy can we expect if a PM and staff is already pressed and their primary goal is execution? One of our goals is to be able to 'know' what our 'enterprise' manpower requirements are with the press of a button. Do we know what our workload is at any point in time with any degree of accuracy-80%, 90%, 95%-or are we being imperfectly precise and dictating unnecessary effort that would be better spent on more production execution efforts? What is the benefit cost ratio for detailed resource plans? Response: The benefits derived greatly outweigh the time requirements for data development and input.